## Minutes of RESULTS, PITZ Physics Seminar, 30.06.2016

Project: PITZ

Participants: F. Stephan, M. Gross, I. Isaev, H. Huck, A. Oppelt, M. Krasilnikov, Q. Zhao, P. Boonpornprasert, G. Loisch, S. Rimjaem, O. Lishilin, T. Rublack, Sargsyan, Zanyan, D. Dettmann, Prof. Beyer (TH Wildau)

## Agenda:

## 1) Dominik Dettmann: Influence of real field profiles on simulated beam parameters at PITZ

Analysis of measured cavity fields, inclusion into ASTRA, comparison with calculated fields, .... Several defense questions → successfully defended his subject

## 2) Igor Isaev: Report from HOPE+SINEMP meeting

- new 200kV DC electron source in Mainz, response time of GaAs and Potassium Cesium antimonide up to 10 ps for 400 nm thickness
- Carbon coating for SC RF guns, Carbon coating results in SEY~0.8 (<1), carbon coating is very stable
- Simulations of multipacting in cathode vicinity, sawtooth shape helps
- First Operational Experience from SRF Gun II: problems with Cs2Te cathodes from own production → contamination, now use Mg and Cu cathodes now, put gun into operation, produced up to 200 pC, Mg cathode laser cleaning, now 12.3 MV/m at cathode, up to 4.5 MeV electron beam energy, 25.6 MV/m on-axis peak field, studied emittance as function of laser spot size, while there is multipacting with Cs2Te cathode they did not see it with Cu and Mg plugs, dark current studies,

**Next steps:** 

By whom?	Until when?	Done on
	By whom ?	By whom? Until when?

Protocol prepared by: F. Stephan, 30.6.2016

(Name, Date)